# ADDITIONAL RECORDS OF ENSIFERA (GRYLLOPTERA) IN ONTARIO

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#### Abstract

Vickery and Kevan (1967) listed all known records of orthopteroid insects in Ontario. Subsequent records for the Ensifera, Order Grylloptera, are listed, together with appropriate comments on distribution.

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Vickery and Kevan (1967) published lists of records for the orthopteroid insects in Ontario, including all of the known records. Johnstone (1971) listed two more species, *Microcentrum rhombifolium* (Saussure) and a species of *Neoconoce-phalus* which was listed as *N. crepitans* (Scudder), both of which were new to the Canadian fauna. Both of these species were collected at Point Pelee, Essex Co., in 1970, but D. M. Wood (pers. comm. 1972) had collected them at the same locality some years earlier. The name *crepitans* was used for this species of *Neoconocephalus* by Cantrall (1968) and others, but recently (Walker *et al.* 1973) *crepitans* was placed in synonymy under *robustus* Scudder. Although a sibling species was discovered and described, *N. bivocatus* T. Walker, Whitesell and Alexander (Walker *et. al.*, *op. cit.*) this taxon does not occur in Canada and *Neoconocephalus robustus* (Scudder 1862) is the name to be applied to specimens from Canada previously recorded as *N. crepitans*.

This paper includes records of captures since 1967, mainly by Kerr, Morris and associates at Erindale College, University of Toronto. Also included are records made by personnel of the Lyman Entomological Museum and Research Laboratory, Macdonald College, McGill University, although these are mainly incidental as emphasis was placed on collection of Acridoidea (Orthoptera) during this time. The specimens are in the collections of the two institutions unless another repository is specified.

# ORDER GRYLLOPTERA SUBORDER ENSIFERA SUPERFAMILY GRYLLACRIDOIDEA

Family Rhaphidophoridae Subfamily Rhaphidophorinae

Ceuthophilus meridionalis Scudder.

Brant Co., 1.7 miles (2.74 km) E. of Paris, 1 9, 6-VII-74.

#### SUPERFAMILY GRYLLOIDEA

# Family Gryllidae

#### Subfamily Nemobiinae

Allonemobius fasciatus (DeGeer).

Bog near Nellie Lake, Hwy 11, N.E. Timmins, 1♂, 2 ♀ ♀, several juveniles, 15-VIII-74.

All of the species of nemobiine crickets were listed by Vickery and Kevan (1967) in the genus *Nemobius*. Vickery and Johnstone (1970, 1973) revised the North American (more specifically Canadian) species, which are now placed as follows: *Allonemobius - A. fasciatus* (DeGeer), *A. allardi* (Alexander and Thomas), *A. griseus griseus* (E. M. Walker), *A. maculatus* (Blatchley); *Neonemobius - N. palustris* (Blatchley); *Eunemobius - E. carolinus carolinus* (Scudder).

#### Family Oecanthidae

#### Subfamily Oecanthinae

Oecanthus fultoni T. J. Walker

Bob's Lake (Sharbot Lake), 13, 1-IX-73; 13, 3-IX-73.

Oecanthus quadripunctatus Beutenmüller.

Bob's Lake (Sharbot Lake) 233, 3-IX-73; Brampton, 1 &, 20-VII-74.

Oecanthus nigricornis F. Walker

Erindale, 1 &, 14-X-70.

#### SUPERFAMILY TETTIGONIOIDEA

# Family Tettigoniidae Subfamily Decticinae

Atlanticus sp.

St. Williams, 13, 21-IX-72; 2 \( \phi \), 25-VIII-73; 3 \( \phi \), 22-VIII-74; Simcoe (Green's Corners), 1 \( \phi \), 30-VIII-74.

This genus is in need of revision and until this is done identifications are uncertain as the species apparently are quite variable. The males in the above series have tegmina which project only slightly beyond the pronotum and would key to Atlanticus davisi Rehn & Hebard in the key of Rentz and Birchim (1968). However, it seems likely that they are neither A. davisi nor A. testaceus (Scudder) (pers. comm., 1974, David Rentz, Academy of Natural Sciences, Philadelphia). They may belong to an undescribed species but their placement must await a revision of the genus which is now being undertaken at Erindale College. A. testaceus is the only species of Atlanticus previously recorded from Canada. We have re-examined the specimens previously reported (Vickery and Kevan 1967) and find that the specimens from Arner have long tegmina and are A. testaceus whereas the specimens from Turkey Point are closer to those in the above series.

Metrioptera (Sphagniana) sphagnorum F. Walker

Ignace, 233, 799, VII-73; Firesteel R. (Upsala), 288, VII-70, 588, 17-VII-71; Beaver Creek (Upsala), 189, 20-VII-70; Trewartha L. (English River, 299, 20-VIII-70; 488, 18-VIII-71; 288, 22-VIII-73; Raith,

The Nellie Lake record is a considerable eastward extension of the known range of this species. Kevan et al. (1963) indicated that M. (S.) sphagnorum might occur in northern Quebec. The present record makes this appear more logical. A search of the area from Noranda to La Sarre, Quebec, should reveal whether or not it does occur so far east.

#### Metrioptera (Roeseliana) roeselii (Hgb.)

Alexandria,  $5 & \delta$ ,  $5 & \varphi$ , 16-VII-73; Carillon Prov. Pk., 2 juveniles, 23-VI-73; Gananoque,  $2 & \delta$ , VII-68; Black Lake (near Peterborough),  $1 & \delta$ , 9-VIII-71; Seeleys 'Bay,  $8 & \delta$ ,  $4 & \varphi$ , 20-VI-72; Leo Lake Rd and Hwy 15 (near Seeley's Bay),  $1 & \delta$ ,  $8 & \varphi$ , 20-VI-72; Vineland,  $4 & \delta$ ,  $5 & \varphi$ , 9-VII-72;  $2 & \varphi$ , 28-VI-73;  $2 & \delta$ , 31-VII-74; Beamsville,  $1 & \delta$ , 22-VII-72;  $1 & \delta$ , 2-VIII-74;  $1 & \delta$ , 8-VIII-74; St. Catharines,  $4 & \delta$ ,  $1 & \varphi$ , 31-VII-74; Jordan,  $2 & \delta$ ,  $1 & \varphi$ , 31-VII-74; Fonthill,  $2 & \delta$ , 31-VII-74; Welland,  $3 & \varphi$ , 31-VII-74; Grimsby Beach,  $2 & \delta$ , 7-VIII-74; Silverdale,  $2 & \delta$ , 31-VIII-74; Blossom Park, Ottawa (sight record, 1973).

Vickery and Kevan (1967) predicted a westerly spread of this species into and across southern Ontario. This has occurred and is continuing. However, it also spread south and westward in New York State and entered Ontario by way of the Niagara Peninsula. At the present time, the two invasions from east and south have not met but this should occur within the next five years. There is some indication that *M. roeselii* may displace *Orchelimum gladiator*, which apparently occupies the same habitat type.

#### Family Conocephalidae

# Subfamily Copiphorinae

Neoconocephalus robustus (Scudder) was reported from Point Pelee as N. crepitans (Scudder) by Johnstone (1971). The present distribution in Ontario of N. lyristes (Rehn and Hebard), which had been reported by several authors (Walker 1902, - as Conocephalus nebrascensis, and Urquhart 1941, among others) is not known. It had been reported from Grimsby, Sarnia, and St. Clair River (see Vickery and Kevan 1967) but has not been collected in recent years, even at these localities.

# Neoconocephalus ensiger (Harris)

Barry's Bay, 4-X-72; Pembroke, 4-X-72; Petawawa, 4-X-72, (all three records by stridulation, not by capture); Bothwell 1  $\delta$ , 15-VIII-73; Erindale, 1  $\delta$ , 29-VII-70; 1  $\delta$ , 29-VII-73; Brant Co., 1.7 mi. E. Paris, 8  $\delta$   $\delta$ , 6-VIII-74 (stridulation of one brown male recorded).

# **Subfamily Conocephalinae**

# Orchelimum gladiator Bruner

Burwash, 1 &, 8-VIII-68; Rutter, 3 & &, 8-VIII-68; Elizabethville, 17 & 3; 8-29-VIII-69; Estaire, 1 &, 3-VIII-70; Nepewassi Lake (Estaire), 1 &, 8-VIII-71; Tilbury North, 1 &, 3-IX-71; Simcoe, 2 & &, 12-VIII-71; Scotland, 1 &, 12-VIII-71; Huttonville, 1 &, 9-VIII-73; Walpole I., 3 & &, 15-VIII-73; Wolfe I. (Kingston), 1 &, 3 \, \theta, 24-VII-73; near Sudbury (in the shadow of the Copper Cliff smelter), 2 & &, 1 \, \theta, 24-VII-74; Muriel Lake Killarney), 1 &, 10-VIII-74, Brant Co., 1.7 mi. E. Paris, 6 & &, 6-VIII-74. This species occurs farther north than was previously known.

#### Orchelimum vulgare Harris

Elizabethville, 58 & & , 5-IX-65 to 14-VIII-73; Jeanette's Creek, 1 & , 25-VIII-70; New Glasgow (Elgin Co.), 1 & , 24-VIII-70; Walpole I., 1 & , 3-IX-71; 2 & & , 15-VIII-73; Long Point, 1 & , 12-VIII-71; Erindale, 1 & , 14-VIII-73; Point Pelee, 14 %, 699, 23-VIII-70; Brampton, 1 & , 14-VIII-73.

O. vulgare, as well as the other species of Orchelimum which follow, does not range nearly so far north as does O. gladiator.

#### Orchelimum volantum McNeill

Long Point, 4 ₺ ₺, 12-VIII-71; Point Pelee, 4 ₺ ₺, 1 ♀, 23-VIII-70.

#### Orchelimum nigripes Scudder

Merlin (Kent Co.), 1 & , 24-VIII-70; Jeanettes' Creek, 2 & & , 25-VIII-70; Rondeau, 1 & , 24-VIII-70; Tilbury Creek (Kent), 3 & & , 25-VIII-70; Point Pelee, 18 & & , 13 & , 23-VIII-70; Tilbury North (Essex), 1 & , 3-IX-71; Holiday Beach Prov. Park, 1 & , 1 juvenile, 7-VIII-74.

#### Orchelimum delicatum Bruner

Tilbury North (Essex) 1 & 3, 3-IX-71; Rondeau, 2 & & 3, 24-VIII-70; Long Point, 2 & 3, 2 & 9, 12-VIII-71; Walpole I., 1 & 3, 15-VIII-73.

#### Orchelimum campestre Blatchley

Jeanette's Creek, 4 & & 19, 19, 25-VIII-70; Long Point, 1 & 19, 12-VIII-71; Port Britain (Durham Co.), 1 & 19, 29-VIII-73.

The Port Britain specimen is macropterous and was the only one found. It was probably a migrant and it appears unlikely that this species is established at this locality, since it is much farther east (on Lake Ontario) than other records which are confined to Essex County.

#### Conocephalus fasciatus (DeGeer)

Upsala, 233, 19, 20-VII-70; Estaire, 233, 19, 3-VIII-70; Erindale, 133, 11-VIII-70; English River, 233, 17-VIII-71; Firesteel R. (Upsala), 133, 11-VIII-72; Brant Co., 1.7 mi. E. Paris, 193,

#### Conocephalus brevipennis (Scudder)

Rondeau, 1 &, 24-VIII-70.

#### Conocephalus nigropleurum (Bruner)

Long Point, 1 &, 12-VIII-71; Walpole I., 1 &, 15-VIII-73.

#### Family Phaneropteridae

#### Subfamily Phaneropterinae

#### Scudderia pistillata Brunner

Streetsville, 1 &, 31-VII-70; Erindale, 1 &, 29-VII-70; Walpole I., 1 &, 15-VIII-70; Algonquin Park, Hemlock Bluffs bog, 1 &, 1 \, 20-VIII-73; 1 \, \&, 17-VIII-74.

#### Scudderia curvicauda (DeGeer)

Elizabethville, 1 &, 24-VII-72; Simcoe, 1 \, 15-VIII-73; 1 \, 3-IX-73.

#### Scudderia septentionalis (Audinet-Serville)

Simcoe, 1 &, 15-VIII-73; 1 &, 5-IX-73; St. Williams, 233, 22-VIII-74; Bronte Park, near Burlington, 1 &, 2-VIII-73 (C.N.C., Ottawa); Hamilton, 433, 10-VIII-60 (Coll. D. M. Wood, R.O.M., Toronto).

Previously recorded only from Guelph, this species was quite numerous at Simcoe (Green's Corners) and St. Williams. It occurs earlier than other species of *Scudderia* and does not persist much later than the end of August. None were found at Simcoe on 30-VIII-74, although it had been common there earlier that month.

Scudderia texensis Saussure and Pictet

Erindale, 1 &, 29-VII-70; 1 &, 27-VIII-70; Oakville, 1 &, 17-IX-70; 1 \, 29-VIII-72.

Amblycorypha oblongifolia (DeGeer)

Beamsville, 1 & , 15-VIII-73; 433, 20-VIII-74; St. Williams, 2 & & , 25-VIII-73; Simcoe, 1 \, 30-VIII-74.

Microcentrum rhombifolium (Saussure) was reported from Point Pelee by Johnstone (1971).

#### Subfamily Pseudophyllinae

Pterophylla camellifolia camellifolia (Fabricius)

St. Williams, 1 &, 25-VIII-73; 233, 22-VIII-74; Bothwell (recording of stridulation of &), 15-VIII-73.

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